



Complete Summary

GUIDELINE TITLE

Abdominal aortic aneurysm.

BIBLIOGRAPHIC SOURCE(S)

Abdominal aortic aneurysm. Philadelphia (PA): Intracorp; 2005. Various p. [19 references]

GUIDELINE STATUS

This is the current release of the guideline.

All Intracorp guidelines are reviewed annually and updated as necessary, but no less frequently than every 2 years. This guideline is effective from July 1, 2005 to July 1, 2007.

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

- Abdominal aortic aneurysm
- Abdominal aortic aneurysm rupture

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Emergency Medicine
Family Practice
Internal Medicine
Surgery

INTENDED USERS

Allied Health Personnel
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Utilization Management

GUIDELINE OBJECTIVE(S)

To present recommendations for the diagnosis, treatment, and management of abdominal aortic aneurysm that will assist medical management leaders to make appropriate benefit coverage determinations

TARGET POPULATION

Individuals with abdominal aortic aneurysm (AAA) and AAA rupture

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Physical examination and assessment of signs and symptoms
2. Diagnostic tests:
 - Laboratory blood work (white blood cell count, hemoglobin, hematocrit)
 - Ultrasound (US)
 - Computed tomography (CT) scan
 - CT scan with echocardiography
 - Magnetic resonance angiography (MRA)
 - Magnetic resonance imaging (MRI)

Note: CT scan, MRA, and MRI are not recommended for suspected abdominal aortic aneurysm rupture

Management/Treatment

1. Surgical repair of aneurysm and graft placement
2. Supportive care to prevent multisystem complications
3. Treatment of underlying hypertension and cardiovascular disease
4. Yearly exam to evaluate for changes for asymptomatic, small aneurysms
5. Referral to specialists

MAJOR OUTCOMES CONSIDERED

- Effectiveness of abdominal aneurysmectomy at preventing rupture
- Morbidity and mortality associated with abdominal aneurysmectomy

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
 Hand-searches of Published Literature (Secondary Sources)
 Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Searches were performed of the following resources: reviews by independent medical technology assessment vendors (such as the Cochrane Library, HAYES); PubMed; MD Consult; the Centers for Disease Control and Prevention (CDC); the U.S. Food and Drug Administration (FDA); professional society position statements and recommended guidelines; peer reviewed medical and technology publications and journals; medical journals by specialty; National Library of Medicine; Agency for Healthcare Research and Quality; Centers for Medicare and Medicaid Services; and Federal and State Jurisdictional mandates.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

A draft Clinical Resource Tool (CRT or guideline) is prepared by a primary researcher and presented to the Medical Technology Assessment Committee or the Intracorp Guideline Quality Committee, dependent upon guideline product type.

The Medical Technology Assessment Committee is the governing body for the assessment of emerging and evolving technology. This Committee is comprised of a Medical Technology Assessment Medical Director, the Benefit and Coverage Medical Director, CIGNA Pharmacy, physicians from across the enterprise, the Clinical Resource Unit staff, Legal Department, Operations, and Quality. The Intracorp Guideline Quality Committee is similarly staffed by Senior and Associate Disability Medical Directors.

Revisions are suggested and considered. A vote is taken for acceptance or denial of the CRT.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnostic Confirmation

Subjective Findings

- Usually asymptomatic; aneurysms that develop slowly may not present with any symptoms until they rupture
- Awareness of heartbeat in abdomen
- Complaint of pain
 - Usually of sudden onset
 - Often located at the abdomen, however may be in the lower back or flank
 - May radiate to buttocks, groin, testicles, or leg(s)

- May be described as constant, throbbing, or colicky
- Vomiting
- Fatigue
- Syncope or lightheadedness
- Urinary retention
- Constipation

Objective Findings

General Exam:

- Unexplained hypotension, tachycardia, signs of hypovolemic shock
- Altered level of consciousness
 - Suggestive of abdominal aortic aneurysm (AAA) dissection/rupture
- Fever - may be associated with mycotic (infective) aneurysm

Abdomen:

- Palpable pulsating midline mass or herniation that is tender to touch
 - Aortic pulsation to the right of midline
 - Mass with tenderness and distention in left lower quadrant (LLQ)
- Abdominal bruit (whooshing sound over the aorta) found in 5 to 10% of the patient population
- Evidence of distal embolization (blue toe syndrome)
- Absent or diminished lower extremity peripheral pulses
- Ureteral colic

Diagnostic Tests

- Laboratory bloodwork - may reveal elevated white blood cell count (WBC) or anemia (abnormally low hemoglobin/hematocrit)
- Ultrasound (US) - most useful initial tool, especially in the emergency room and suspected rupture of AAA
 - Current studies have demonstrated that efficacy of using hand-held portable US closely approximates conventional duplex examination.
 - May be used as an extension of routine physical examination in vascular patients
- Computed tomography (CT) scan - very accurate and useful, but also time-consuming; not indicated in cases of suspected AAA rupture
- Computed tomography (CT) scan with echocardiography - this combination is most appropriate with ascending aortic disease or cardiac complications; also very useful in acute situations
- Magnetic resonance angiography (MRA) - extremely accurate test, but also time-consuming; not indicated for suspected AAA rupture
- Magnetic resonance imaging (MRI) - most appropriate investigation for chronic aortic disease; as above, not indicated for suspected AAA rupture

Differential Diagnosis

- Pancreatitis (See the Intracorp guideline Pancreatitis)
- Ischemic bowel

- Diverticulitis (See the Intracorp guideline Diverticular Disease)
- Appendicitis (See the Intracorp guideline Appendicitis)
- Spinal disease
- Renal colic (See the Intracorp guideline Nephrolithiasis)
- Urinary tract infection (See the Intracorp guideline Urinary Tract Infection)
- Pulmonary embolus (See the Intracorp guideline Pulmonary Embolism)

Treatment

Treatment Options

- Surgical repair with excision of aneurysm and graft placement (See the Intracorp guideline Aneurysmectomy, Abdominal)
 - Emergent surgery for suspected rupture
 - Supportive care to prevent multisystem complications
- Treat underlying hypertension and cardiovascular disease
- For asymptomatic, small aneurysms; yearly exam is recommended to evaluate for changes
 - Studies show a widely variable pattern of aneurysm extension; some aneurysms may have long periods of non-growth, others displayed slight continuous increase in size.
 - Medical treatment to inhibit aneurysm growth with matrix metalloproteinase (MMP) inhibitors is still investigational.

Duration of Medical Treatment

- Medical - Optimal: 7 day(s), Maximal: 30 day(s)
- Surgical - Optimal: 30 day(s), Maximal: 360 day(s)

Additional information regarding primary care visit schedules, referral options, and specialty care is provided in the original guideline document.

The original guideline document also provides a list of red flags that may affect disability duration, and return to work goals, including

- Resolving hypertension, abdominal aortic aneurism size less than 4 cm
- After elective endoluminal surgical repair
- After elective open surgical repair
- After surgical repair with post-op complications (infection, renal failure)

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis, treatment, and management of abdominal aortic aneurysm that assist medical management leaders to make appropriate benefit coverage determinations

POTENTIAL HARMS

Operative mortality for open surgical repair of an abdominal aortic aneurysm is 4 to 5%, and nearly one-third of patients undergoing this surgery have other important complications (e.g., cardiac and pulmonary) so morbidity post-op can be significant. Additionally, men having surgery are at increased risk for erectile dysfunction.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005

GUIDELINE DEVELOPER(S)

Intracorp - Public For Profit Organization

SOURCE(S) OF FUNDING

Intracorp

GUIDELINE COMMITTEE

CIGNA Clinical Resources Unit (CRU)
Intracorp Disability Clinical Advisory Team (DCAT)
Medical Technology Assessment Committee (MTAC)
Intracorp Guideline Quality Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Policies and procedures. Medical Technology Assessment Committee Review Process. Philadelphia (PA): Intracorp; 2004. 4 p.
- Online guideline user trial. Register for Claims Toolbox access at www.intracorp.com.

Licensing information and pricing: Available from Intracorp, 1601 Chestnut Street, TL-09C, Philadelphia, PA 19192; e-mail: lbowman@mail.intracorp.com.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on August 9, 2005. The information was verified by the guideline developer on August 31, 2005.

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